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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of )  
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GTE CORPORATION, )  
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Transferor, )  
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and )  
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BELL ATLANTIC CORPORATION, )  
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Transferee, )  
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For Consent to Transfer Control )

CC Docket No. 98-184

REPLY COMMENTS OF PIMMITT RUN RESEARCH INC.

February 22, 2000

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## **I. Executive Summary**

Pimmit Run Research Inc. (PRR) welcomes the opportunity to provide Reply Comments on Bell Atlantic and GTE's Supplemental Filing in which they propose to divest GTE-Internetworking as a condition for approval of the merger. PRR supports the proposed merger between Bell Atlantic and GTE as being in the public interest and as being vitally important in ensuring true competition in the Internet backbone arena.

Bell Atlantic's and GTE's proposal to divest GTE-Internetworking eliminates the legal issues which might arise under Section 271. The merged company's proposal and re-acquisition of DataCo (the current GTE Internetworking, called DataCo as provided in the Bell Atlantic/GTE filing), will increase competition in the Internet backbone market currently dominated by the largest Inter-Exchange Carriers (IXCs). The companies' proposal, including the conditions to allow them to re-acquire DataCo should be approved and endorsed by the Commission.

## **II. Statement of Interests**

Pimmit Run Research Inc. is a strategic Internet consulting firm in McLean, Virginia. Robert Gibson is Vice President and the principal co-founder of PRR.

In 1993, Gibson co-founded Capital Area Internet Service (CAIS) in McLean, Virginia. CAIS was one of the earlier "peer" networks at the principal Internet Access Point MAE EAST. Mr. Gibson has over 20 years of experience in the telecommunications and computer fields, and has worked

in a consulting capacity with the U.S. government and major telecommunications companies such as MCI, Bell Atlantic, Cable & Wireless, and AT&T. Mr. Gibson's knowledge and understanding of routines and key parts of the Internet is the basis of this document.

### **III. PRR's Comments in Support of Bell Atlantic's and GTE's DataCo Proposal**

PRR's support for Bell Atlantic and GTE proposal is based on the Comments.

#### **A. Internet Backbone**

Major Internet providers are at the heart of the modern Internet backbone. The major Internet backbone providers have in place extensive fiber optic facilities criss-crossing the United States. A large portion of the bandwidth on their fiber optic facilities is being used exclusively for Internet traffic. The major Internet backbone providers often have settlement free connections ("peering" relationships) between each other.<sup>1</sup> These relationships make the cost of passing Internet packets between each other close to free. These settlement free relationships or peering make the cost of running an Internet backbone extremely inexpensive for the major Internet providers who entered the market very early but very expensive for new Internet backbone providers, regardless of their investment in facilities.

Today, the major Internet backbone providers are all Inter-Exchange Carriers (IXCs). Through acquisitions and mergers, the number of these IXC's is steadily getting smaller. The recent sale of MCI's Internet backbone

and Internet customer base to London-based Cable & Wireless PLC was intended to keep some level of competitiveness in the U.S. major Internet backbone arena. However, the MCI pre-merger Internet customers that were to become Cable & Wireless' Internet customers did not remain with Cable & Wireless. Instead, many of these Internet customers transitioned back to MCI/WorldCom UUnet or other Internet providers.

Currently, MCI WorldCom's UUnet subsidiary has an even larger share of the US Internet backbone business than before the MCI-WorldCom merger. The major Internet backbone providers' capabilities and the advantages of Tier One status make it very difficult to have true competition in the US Internet backbone market.

#### **B. DataCo**

GTE Internetworking (GTEI) is principally composed of the former BBNnetwork, which was a combination of Suranet (MidAtlantic), Nearnnet (Northeast), and Barnet (West Coast). These three networks represented what at one time were sizeable portions of the original Internet backbone in their respective regions. For this reason, the Internet backbone community has treated GTEI for the most part as another Tier One backbone in terms of peering relationships. GTE-I has a much smaller customer base than UUnet or Sprint today, but still has the peering characteristics of a Tier One provider. Strengthening the current GTE-I's ability to compete with the major IXC backbones will help to provide an important competitive counter-

balance and enhance competition in the backbone and throughout the Internet.

### **C. Concentration of Ownership of the Internet Backbone**

Today the three largest Tier One Internet backbone providers (including MCI and Sprint) contain upwards of 60 to 80 percent of the domestic Internet backbone market, as measured by the customer base they control. AT&T has an extensive "private" backbone acquired as part of its cable purchases. While the AT&T backbones "peer", they do not allow other ISPs to connect to their systems. This concentration of ownership and the difficulty of establishing Tier One peering relationships inhibit the further development of competition in the Internet backbone market. AT&T, in particular has incentive to cripple the viability of a smaller Tier One backbone like DataCo by denying DataCo the right to be re-acquired after Bell Atlantic/GTE satisfy Section 271 requirements.

Once pushed out of Tier One of backbone providers, DataCo would be hard pressed to re-enter.

The Internet's capacity and throughput is based on the number and quality of connections between carriers, not simply on the amount of capacity that is available on a gross basis. The relationships between Tier One carriers are the key to Internet backbone growth and quality.

There is a false perception that because there are more and more physical fiber optic facilities being laid every day throughout the U.S., the Internet backbone capacity, speed and quality is increasing. In fact, this additional

physical bandwidth cannot be effectively used as an Internet backbone without some type of high quality, close relationship to the three largest ISPs. These ISPs do not want to establish more “free” peering connections. Instead, these ISPs want to sell “customer” connections to potential Internet backbones, and therefore cause the economics to be fundamentally different for competing ISPs. Many of the latecomer Internet Service Providers are faced with the reality of no peering potential with the dominant Tier One ISPs regardless of the size of their pipes. They are therefore only able to peer with the smaller ISPs and forced to purchase bandwidth from the dominant Tier One ISPs at prices that are held artificially high.

**D. Need for Increased Internet Backbone Competition**

Too few alternatives exist for the smaller or regional ISPs. Competition needs to exist to permit different arrangements, and more options for the smaller ISPs. The Internet has and will change rapidly, and the ability to offer new types of service and methods of delivering service can only become a reality if there are alternatives and real competition.

At one time, there were several regional Internet backbone providers and a few national providers. Regional Internet backbone providers focused on serving the local region or industry. With the National Science Foundation’s NSFnet turning the Internet over to private industry, the regional Internet backbone providers began to depend on the legacy facilities based IXC’s to provide connections to all of the regional Internet backbones. The “regionals” now were dependent on the Internet capabilities of the legacy

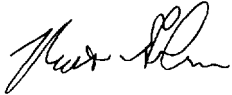
IXC's to handle traffic between the regionals. Soon the role of the "regionals" became less important and many of the costs of operating their portion of the Internet were based on the few IXCs available (or capable) of performing this function. With fewer and fewer ISPs to choose from, prices have not dropped, and services have not improved dramatically.

### **III. Conclusion**

The proposal offered by GTE and Bell Atlantic to spin off DataCo and allow for its re-acquisition only after Bell Atlantic has successfully completed the 271 process in its region will provide the best of all worlds: increased incentives for Bell Atlantic to move forward to satisfy the 271 requirements and the potential creation (once the 271 requirements are met) of a significantly stronger backbone player to compete with the top tier backbones concentrated in the hands of the major IXCs.

As a long time participant in the creation of Internet services businesses and as someone long involved in the development of Internet interconnection facilities and processes such as those I worked on at MAE-East, I urge the Commission to approve Bell Atlantic's and GTE's DataCo proposal for the long-term good of the Internet and for its continued expansion into the broadband promise of the future.

Respectfully submitted by,



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<sup>1</sup> "Peering" is an industry term used to describe the way one Internet backbone "announces" to its peer Internet backbones from which part of the Internet it can accept traffic. It was generally understood that connecting two networks improves connectivity. By tradition, peering between Internet backbones was settlement free (no cost). When the Internet was young, the main driving force was to improve quality of connectivity between the various backbones. The faster and higher quality the connection is between Internet backbones, the higher quality the connection is for the Internet consumer.

At one time peering was universally available as long as the Internet backbone was managed in a technically sound fashion. As the Internet became more commercialized and the management of the Internet companies became more dominated by the traditional long distance telephone company management teams, universally free peering disappeared. In the traditional switched telephone company, interconnection agreements were often settlement based. In Internet peering arrangements, it is almost technically impossible to have a settlement basis as in the switched telephone business.

Today, few Internet backbone providers generally will not discuss what they require for peering agreements. The terms of the vast majority of the active peering agreements are further obfuscated by mutual non-disclosure agreements between the peering parties.